The historical specificity of early life car ownership as an indicator of socioeconomic position

A Ellaway, S Macintyre, L McKay

It has consistently been shown in the UK that those living in households with access to a car have lower mortality rates than those without household car access.¹ It has usually been inferred from this that car ownership is a good marker of material living standards,² and it has therefore been incorporated in several measures of area deprivation. It is often used in epidemiological studies as a measure of socioeconomic status in the absence of good data on income or occupational social class. Increasing attention has recently been given to a life course approach to socioeconomic determinants of health, with various indicators including car ownership being used to measure early in life conditions.³ The way in which the meaning of car access, and its role as a predictor of health outcomes, might vary across place and time has rarely been explored. We present data here suggesting that its significance may differ historically within the UK.

PARTICIPANTS, METHODS, AND RESULTS

Two cohorts, born around 1932 (n=706) and 1952 (n=717), participating in the West of Scotland Twenty-07 study⁴ were asked in 1995, as part of a suite of questions about childhood socioeconomic conditions: “how old were you when you or your household first owned a car?”. Table 1 compares across the cohorts the proportion who: had never had a car, and age in groups, and mean age, at which respondents reported their household first having a car, by social class (using the registrar general’s classification of the current or most recent occupation of the head of household). A much higher proportion of those in the 1932 cohort (23%) than in the 1952 cohort (8%; χ²=213.3, df =3, p<0.001) reported that their household had never owned a car. The mean age at which respondents’ households first had a car varied by social class in the expected direction, but was younger in the 1952 cohort; for example, the mean age at which households in social class II in the 1932 cohort acquired a car was the same as for those in social class V in the 1952 cohort.

COMMENT

We suggest it is important take account of the historical context of measures such as household car access. The 1932 cohort were children in the depression and second world war, the 1952 cohort were born during the postwar baby boom and experienced the end of food rationing and establishment of universal health and welfare system. Car ownership was comparatively rare when the older cohort was born (around 50 per thousand population), and doubled to around 100 per thousand population when the later cohort was born. Car ownership was likely to have been a more potent marker of family advantage in childhood among the older compared with the younger cohort. One should therefore be cautious in using household car access in childhood or youth as a measure of socioeconomic position or access to material resources in all age samples, as the significance of the measure may well vary by age cohort. Although the need to be wary about the

<table>
<thead>
<tr>
<th>Social class</th>
<th>Never had a car</th>
<th>&lt;18 years of age</th>
<th>19–30 years of age</th>
<th>31+ years of age</th>
<th>Mean age (y)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>1952 cohort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>–</td>
<td>–</td>
<td>9.7</td>
<td>7</td>
<td>81.9</td>
</tr>
<tr>
<td>II</td>
<td>4.6</td>
<td>11</td>
<td>16.7</td>
<td>40</td>
<td>67.1</td>
</tr>
<tr>
<td>III non-manual</td>
<td>8.2</td>
<td>7</td>
<td>20.0</td>
<td>17</td>
<td>64.7</td>
</tr>
<tr>
<td>III manual</td>
<td>11.0</td>
<td>26</td>
<td>12.3</td>
<td>29</td>
<td>58.1</td>
</tr>
<tr>
<td>IV</td>
<td>18.8</td>
<td>12</td>
<td>3.1</td>
<td>2</td>
<td>50.0</td>
</tr>
<tr>
<td>V</td>
<td>20.0</td>
<td>4</td>
<td>5.0</td>
<td>1</td>
<td>45.0</td>
</tr>
<tr>
<td>All 1952 cohort</td>
<td>8.4</td>
<td>60</td>
<td>13.4</td>
<td>96</td>
<td>63.2</td>
</tr>
<tr>
<td></td>
<td>All respondents who never had a car</td>
<td>15.5</td>
<td>220</td>
<td>7.7</td>
<td>110</td>
</tr>
</tbody>
</table>

p<0.001
supposed continuity of indicators has been noted in relation to occupational social class, it also applies to other commonly used measures such as housing tenure, education, sharing a bedroom, having indoor toilet facilities, etc. Contextualising measures of socioeconomic position in terms of the nearest census or available routine surveys is advised.

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REFERENCES
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